

# **POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM**

Application Number	
Filing Date	
First Named Inventor	Michael L. Connell
Title	Apparatus and Method ...
Art Unit	
Examiner Name	
Attorney Docket Number	HES 2001-IP-005011U1C1

I hereby appoint:

☐ Practitioners at Customer Number:

OR

☒ Practitioner(s) named below:

Name	Registration Number
see attached	

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

OR

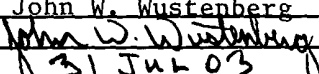
<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City	State	Zip		
Country				
Telephone	Fax			

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

## **SIGNATURE of Applicant or Assignee of Record**

Name	John W. Wustenberg		
Signature			
Date	31 JUL 03	Telephone	580-251-3782

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

<b>DECLARATION</b>	<b>REGISTERED PRACTITIONER INFORMATION (Supplemental Sheet)</b>
--------------------	---

Name	Registration Number	Name	Registration Number
Halliburton Energy Services, Inc. Practitioners		Haynes & Boone Practitioners	
William E. Shull	29,438	Jeffrey M. Becker	35,442
Michael D. McCully	29,566	James R. Bell	26,528
Mark A. Smith	30,220	Timothy Bliss	50,925
William M. Imwalle	35,904	Randall C. Brown	31,213
Paul I. Herman	37,349	L. Howard Chen	46,615
Robert A. Kent	28,626	Randall E. Colson	40,566
Craig W. Roddy	36,256	Michael A. Davis, Jr.	35,488
John W. Wustenberg	35,415	Ruben C. DeLeon	37,812
Scott F. Wendorf	48,029	Andrew S. Ehmke	50,271
		Brian J. Hubbard	45,873
		Rita M. Irani	31,028
		Mark P. Kahler	29,178
		Warren B. Kice	22,732
		Christopher P. Kosh	42,760
		Michael Balconi-Lamica	34,291
		J. Andrew Lowes	40,706

**Caution Hour Statement:** This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the content of this form are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

**Declaration — Registered Practitioner Information (Supplemental Sheet) (PTO/SB/02C)(1-1.4)**

**REGISTERED PRACTITIONER  
INFORMATION  
(Supplemental Sheet)**

Name	Registration Number	Name	Registration Number
		Haynes & Boone Practitioners	
		Todd D. Mattingly	40,298
		David L. McCombs	32,271
		John Montgomery	31,124
		Bill R. Naifeh	44,962
		David M. O'Dell	42,044

**Duration Hour Statement:** This form is estimated to take 6.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Michael L. Connell et al.

Application No./Patent No.: unknown Filed/Issue Date: concurrently herewith

Entitled: Apparatus and Method for Locating Joints In Coiled Tubing Operations

Halliburton Energy Services, Inc., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 12661, Frame 385, or for which a copy thereof is attached.

**OR**

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.  
[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

31 JUL 03  
Date  
580-251-3782  
Telephone number

John W. Wustenberg  
Typed or printed name  
John W. Wustenberg  
Signature  
Attorney  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



MAY 07, 2002

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN, OK 73536-0440

PTAS

RECEIVED

MAY 13 2002

JOHN W. WUSTENBERG

Commissioner for Trademarks  
Arlington, VA 22202-3513  
www.uspto.gov



\*102011543A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/01/2002

REEL/FRAME: 012661/0385  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST. RE-RECORD TO REMOVE TWO ASSIGNORS INADVERTENTLY LISTED ON THE COVER SHEET OF A PREVIOUS ASSIGNMENT ON REEL 012284 FRAME 0337.

ASSIGNOR:

CONNELL, MICHAEL L.

DOC DATE: 10/12/2001

ASSIGNOR:

TUCKER, JAMES C.

DOC DATE: 10/12/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168  
PATENT NUMBER:

FILING DATE: 10/12/2001  
ISSUE DATE:

SEDLEY PYNE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

03-14-2002



Form PTO-1595

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌

R

102011543  
PATENT ONLYU.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael L. Connell  
James C. Tucker

3.1.02

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

10/12/01

Execution Date: \_\_\_\_\_

Street Address: 10200 Bellaire Boulevard

City: Houston State: TX Zip: 77072

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 09/977,168

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: Halliburton Energy Services

Street Address: 2600 South Second Street

City: Duncan State: OK Zip: 73536-0440

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

DO NOT USE THIS SPACE

## 9. Signature.

John W. Wustenberg

Name of Person Signing

John W. Wustenberg

Signature

12 FEB 02

Date

Total number of pages including cover sheet, attachments, and documents: 6

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

03/13/2002 6TON11 00000132 080300 09997168

01 FC:581

40.00 CH

03-14-2002



Form PTO-1595

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌

R

102011543  
PATENTIS ONL.U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael L. Connell

James C. Tucker

3.1.02

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_

Street Address: 10200 Bellaire Boulevard

City: Houston State: TX Zip: 77072

Execution Date: 10/12/01

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 09/977,168

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: Halliburton Energy Services

Street Address: 2600 South Second Street

City: Duncan State: OK Zip: 73536-0440

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

DO NOT USE THIS SPACE

## 9. Signature.

John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
Signature

12 FEB 02

Date

Total number of pages including cover sheet, attachments, and documents: 6

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231
 OFFICE OF PATENT RECORDS  
 10200 BELLAIRE BOULEVARD  
 HOUSTON, TX 77072  
 12 FEB 02 PM 1:38  
 IMAGE SECTION

03/13/2002 GT0N11 00000132 080300 09997168

01 FC:581 40.00 CH



Form PTO-1595

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼



101889450

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael L. Connell  
Robert G. Howard  
James C. Tucker  
Douglas N. Love

10/12/01

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other \_\_\_\_\_

Execution Date: October 12, 2001

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Street Address: 10200 Bellaire BoulevardCity: Houston State: TX Zip: 77072Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 10/12/01

A. Patent Application No.(s)

09/977768

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy Services

Street Address: \_\_\_\_\_

2600 South Second StreetCity: Duncan State: OK Zip: 735366. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00

Enclosed



Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
Signature12 OCT 01

Date

Total number of pages including cover sheet, attachments, and documents: 4

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

10/29/2001 GTON11 00000100 080300 09977168

01 FC:581

40.00 CH

1046 U.S. PTO  
09/9777168

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application first executed on October 12, 2001, submitted concurrently herewith, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

Michael L. Connell  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

James C. Tucker  
James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens     )

Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Midland, Midland County, Texas U.S.A.

\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                              ) ss  
County of Midland     )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**B x Assignments**  
**Commissioner of Patents and Trademarks**  
**Washington, D.C. 20231**

**CORRECTION OF RECORDED COVER SHEET ERROR(S) (37 C.F.R. 3.34)**

NOTE: See 37 CFR 3.34.

- Applicant has noted an error in the cover sheet for the assignment(s) (document(s)) previously recorded on October 12, 2001  
Date of recordal

Reel 012284 Frame 0337

- Attached hereto is:

- ☐ the originally recorded document.  
☒ a copy of the originally recorded document.

- Also attached hereto is a corrected cover sheet for recordation.

---

**CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))**

I hereby certify that this correspondence is, on the date shown below, being:

**MAILING**

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

**FACSIMILE**

☐ transmitted by facsimile to the Patent and Trademark Office.

Date 02/13/02

Sheila Gibbs  
 Signature

Sheila Gibbs  
 (type or print name of person certifying)

(Correction of Recorded Cover Sheet Error(s) [16-8]—page 1 of 2)

4. The error in the originally recorded cover sheet is apparent when that cover sheet is compared with the recorded document because:

Applicant inadvertently listed all four (4) inventors on the recordation coversheet: Michael L. Connell; Robert G. Howard; James C. Tucker and Douglas N. Love.

Applicant should have only listed the two (2) inventors who had signed the Assignment: Michael L. Connell and James C. Tucker.

5. The recording fee is shown in the corrected cover sheet filed herewith. Payment of this recording fee is in the manner set forth in the corrected cover sheet.

NOTE: "A fee is required for each application, patent and registration against which the document is recorded as identified in the cover sheet." 37 CFR 3.41

Reg. No.: 35,415

Tel. No.: (580 ) 251-3782

Customer No.: 29920

John W. Wustenberg  
SIGNATURE OF PRACTITIONER

John W. Wustenberg  
(type or print name of practitioner)

P.O. Box 1431  
P.O. Address

Duncan, OK 73536-0440

JAN 11 2002

TECH. W. DIV. 1

JANUARY 08, 2002

PTAS

Chief Financial Officer and Chief Administrative Officer  
Washington, DC 20231  
www.uspto.gov

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN, OK 73536



\*101889450A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2001

REEL/FRAME: 012284/0337  
NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CONNELL, MICHAEL L.

DOC DATE: 10/12/2001

ASSIGNOR:

HOWARD, ROBERT G.

DOC DATE: 10/12/2001

ASSIGNOR:

TUCKER, JAMES C.

DOC DATE: 10/12/2001

ASSIGNOR:

LOVE, DOUGLAS N.

DOC DATE: 10/12/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168

PATENT NUMBER:

FILING DATE: 10/12/2001

ISSUE DATE:

DOROTHY BASMA, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



Form PTO-1595  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼



101889450

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Michael L. Connell  
Robert G. Howard  
James C. Tucker  
Douglas N. Love

10/12/01

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: October 12, 2001

2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Street Address: 10200 Bellaire Boulevard

City: Houston State: TX Zip: 77072

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 10/12/01

A. Patent Application No.(s)

09/977168

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy Services

Street Address: \_\_\_\_\_

2600 South Second Street

City: Duncan State: OK Zip: 73536

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed

☒ Authorized to be charged to deposit account

8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John W. Wustenberg  
Name of Person Signing

John W. Wustenberg  
Signature

12 OCT 01  
Date

Total number of pages including cover sheet, attachments, and documents: 4

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

10/29/2001 6T0H11 00000100 080300 09977168

01 FC:581

40.00 CH

1046 U.S. PTO

09/977168

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application first executed on October 12, 2001, submitted concurrently herewith, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

Michael L. Connell  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

James C. Tucker

James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs

(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Midland, Midland County, Texas U.S.A.

\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                                  ) ss  
County of Midland     )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Assignments  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

## CORRECTION OF RECORDED COVER SHEET ERROR(S) (37 C.F.R. 3.34)

NOTE: See 37 CFR 3.34.

1. Applicant has noted an error in the cover sheet for the assignment(s) (document(s)) previously recorded on October 12, 2001  
Date of recordal

Reel 012284 Frame 0337

2. Attached hereto is:

- ☐ the originally recorded document.  
☒ a copy of the originally recorded document.

3. Also attached hereto is a corrected cover sheet for recordation.

---

**CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))**

I hereby certify that this correspondence is, on the date shown below, being:

**MAILING**

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

**FACSIMILE**

☐ transmitted by facsimile to the Patent and Trademark Office.

Date: 02/13/02

Sheila Gibbs  
Signature

Sheila Gibbs  
(type or print name of person certifying)

(Correction of Recorded Cover Sheet Error(s) [16-8]—page 1 of 2)

4. The error in the originally recorded cover sheet is apparent when that cover sheet is compared with the recorded document because:

Applicant inadvertently listed all four (4) inventors on the recordation coversheet: Michael L. Connell; Robert G. Howard; James C. Tucker and Douglas N. Love.

Applicant should have only listed the two (2) inventors who had signed the Assignment: Michael L. Connell and James C. Tucker.

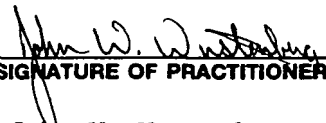
5. The recording fee is shown in the corrected cover sheet filed herewith. Payment of this recording fee is in the manner set forth in the corrected cover sheet.

*NOTE: "A fee is required for each application, patent and registration against which the document is recorded as identified in the cover sheet." 37 CFR 3.41*

Reg. No.: 35,415

Tel. No.: (580 ) 251-3782

Customer No.: 29920

  
\_\_\_\_\_  
SIGNATURE OF PRACTITIONER  
  
John W. Wustenberg  
\_\_\_\_\_  
(type or print name of practitioner)  
  
P.O. Box 1431  
\_\_\_\_\_  
P.O. Address  
  
Duncan, OK 73536-0440  
\_\_\_\_\_

JAN 14 2002

UNITED STATES PATENT AND TRADEMARK OFFICE

JANUARY 08, 2002

PTAS

Chief Financial Officer and Chief Administrative Officer  
Washington, DC 20231  
www.uspto.gov

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN, OK 73536



\*101889450A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2001

REEL/FRAME: 012284/0337  
NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CONNELL, MICHAEL L.

DOC DATE: 10/12/2001

ASSIGNOR:

HOWARD, ROBERT G.

DOC DATE: 10/12/2001

ASSIGNOR:

TUCKER, JAMES C.

DOC DATE: 10/12/2001

ASSIGNOR:

LOVE, DOUGLAS N.

DOC DATE: 10/12/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168

FILING DATE: 10/12/2001

PATENT NUMBER:

ISSUE DATE:

DOROTHY BASMA, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



MAR 18 2002

MARCH 11, 2002

PTAS

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN OK 73536

Chief Information Officer  
Washington, DC 20231  
www.uspto.gov



\*101951931A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/04/2002

REEL/FRAME: 012462/0831  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HOWARD, ROBERT G.

DOC DATE: 12/06/2001

ASSIGNOR:

LOVE, DOUGLAS N.

DOC DATE: 12/04/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168

PATENT NUMBER:

FILING DATE: 10/12/2001

ISSUE DATE:

PEARLENE FOSTER, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

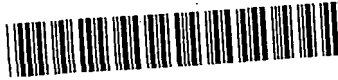
JAN 04 2002

01-17-2002

Form 1-1995  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇨ ⇨ ⇨ ▼

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

101951931

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Robert G. Howard  
Douglas N. Love

2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_Street Address: 10200 Bellaire BoulevardCity: Houston State: TX Zip: 77072Howard (12-06/01)  
Execution Date: Love (12/04/01)Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

09/977,168

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy ServicesStreet Address: 2600 South Second StreetCity: Duncan State: OK Zip: 735366. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
Signature6 DEC 01

Date

Total number of pages including cover sheet, attachments, and documents: 4

01/16/2002 DBYRHE

00000038 080300

09977168

01 FC:581

40.00 CH

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number 09/977,168 filed on October 12, 2001, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

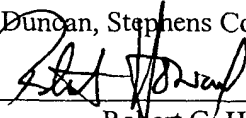
Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 6 day of December, 2001, at ~~Duncan~~, Stephens County, Oklahoma U.S.A.

  
\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this 6th day of December, 2001.

Seal

  
\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

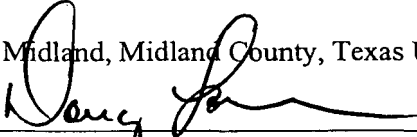
Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

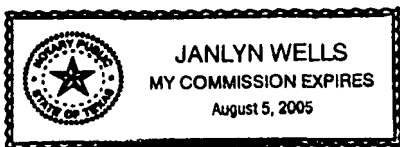
Executed this 4th day of December, 2001, at Midland, Midland County, Texas U.S.A.

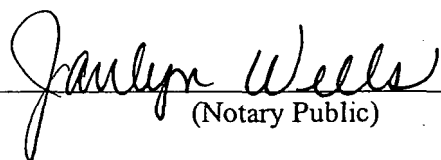
  
\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                              ) ss  
County of Midland    )

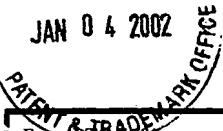
Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this 4th day of December, 2001.

Seal

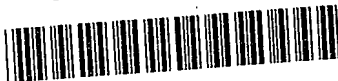


  
\_\_\_\_\_  
(Notary Public)

JAN 04 2002



01-17-2002



101951931

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

Form 1395

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Robert G. Howard

Douglas N. Love

1-4-02

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other \_\_\_\_\_

Howard (12-06/01)

Execution Date: Love (12/04/01)Street Address: 10200 Bellaire BoulevardCity: Houston State: TX Zip: 77072Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

09/977,168

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy ServicesStreet Address: 2600 South Second StreetCity: Duncan State: OK Zip: 735366. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*John W. Wustenberg

Name of Person Signing

John W. Wustenberg

Signature

6 DEC 01

Date

Total number of pages including cover sheet, attachments, and documents: 4Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

01/16/2002 DBYRNE

00000038 080300

09977168

01 FC:581

40.00 CH

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number 09/977,168 filed on October 12, 2001, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 6 day of December, 2001, at ~~Duncan~~, Stephens County, Oklahoma U.S.A.

  
\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this 6th day of December, 2001.

Seal

  
\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004



Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

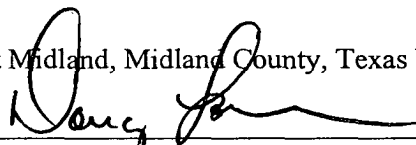
Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

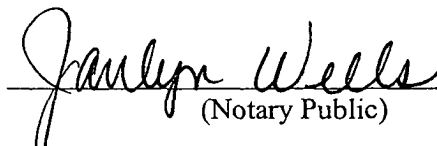
Executed this 4<sup>th</sup> day of December, 2001, at Midland, Midland County, Texas U.S.A.

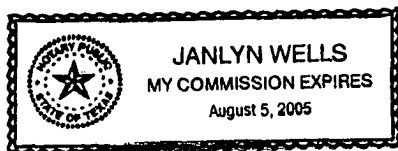
  
\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                              ) ss  
County of Midland    )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this 4<sup>th</sup> day of December, 2001.

Seal

  
\_\_\_\_\_  
(Notary Public)



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing      OR      ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	2001-IP-005011
First Named Inventor	Michael L. Connell
<b>COMPLETE IF KNOWN</b>	
Application Number	/
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Apparatus and Method for Locating Joints In Coiled Tubing Operations

*(Title of the Invention)*

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)  as United States Application Number or PCT International

Application Number  and was amended on (MM/DD/YYYY)  (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☒ Customer Number or Bar Code Label ☐ OR ☐ Correspondence address below

Name

Address

City

State

ZIP

Country

Telephone

Fax

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name

(first and middle [if any])

Michael L.

Family Name

or Surname

Connell

Inventor's  
Signature

*Michael L. Connell*

Date 10-12-01

Residence: City Duncan

State OK

Country U.S.

Citizenship U.S.

Mailing Address 1315 West Cedar

City

Duncan

State OK

ZIP 73533

Country U.S.

NAME OF SECOND INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name

(first and middle [if any])

Robert G.

Family Name

or Surname

Howard

Inventor's  
Signature

Date

Residence: City Duncan

State OK

Country U.S.

Citizenship U.S.

Mailing Address 2105 Highmeadow

City

Duncan

State OK

ZIP 73533

Country U.S.

☒ Additional inventors are being named on the 1st supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

Please type a plus sign (+) inside this box →



PTO/SB/02A (11-00)  
Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## DECLARATION

**ADDITIONAL INVENTOR(S)**  
**Supplemental Sheet**  
Page 1 of 1

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
James C.		Tucker	
Inventor's Signature <i>James C. Tucker</i>		Date <i>10-12-01</i>	
Residence: City Springer	State OK	Country U.S.	Citizenship U.S.
Mailing Address HC 60, Box 108			
Mailing Address			
City Springer	State OK	ZIP 73458	Country U.S.
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Douglas N.		Love	
Inventor's Signature		Date	
Residence: City Midland	State TX	Country U.S.	Citizenship U.S.
Mailing Address 1904 ECR 130			
Mailing Address			
City Midland	State TX	ZIP 79706	Country U.S.
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

# DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☐

Declaration  
Submitted  
with Initial  
Filing

OR

☒

Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16 (e))  
required)

Attorney Docket Number

2001-IP-005011U1

First Named Inventor

Michael L. Connell

**COMPLETE IF KNOWN**

Application Number

09/977,168

Filing Date

10/12/2001

Art Unit

Examiner Name

unknown

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Apparatus and Method For Locating Joints In Coiled Tubing Operations

(Title of the Invention)

the specification of which

☐

is attached hereto

OR

☒

was filed on (MM/DD/YYYY)

10/12/2001

as United States Application Number or PCT International

Application Number

09/977,168

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION — Utility or Design Patent Application**Direct all correspondence to: ☒Customer Number  
or Bar Code LabelOR ☐

Correspondence address below

Name

Address

City

State

ZIP

Country

Telephone

Fax

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**NAME OF SOLE OR FIRST INVENTOR :**☐ A petition has been filed for this unsigned inventorGiven Name Michael L.  
(first and middle [if any])Family Name Connell  
or SurnameInventor's  
Signature

Date

Duncan

OK

U.S.

U.S.

Residence: City

State

Country

Citizenship

Mailing Address 1315 West Cedar

Duncan

OK

73533

U.S.

City

State

ZIP

Country

**NAME OF SECOND INVENTOR:**☐ A petition has been filed for this unsigned inventorGiven Name Robert G.  
(first and middle [if any])Family Name Howard  
or SurnameInventor's  
Signature

Date

Duncan

OK

U.S.

U.S.

Residence: City

State

Country

Citizenship

Mailing Address 2105 Highmeadow

Duncan

OK

73533

U.S.

City

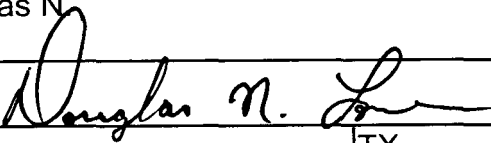
State

ZIP

Country

☒ Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

**DECLARATION****ADDITIONAL INVENTOR(S)**  
**Supplemental Sheet**  
Page 1 of 1

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name James C.		Family Name or Surname Tucker	
Inventor's Signature		Date	
Residence: City Springer	State OK	Country U.S.	Citizenship U.S.
Mailing Address HC 60, Box 108			
Mailing Address			
City Springer	State OK	ZIP 73458	Country U.S.
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name Douglas N.		Family Name or Surname Love	
Inventor's Signature 		Date 4 Dec 01	
Residence: City Midland	State TX	Country U.S.	Citizenship U.S.
Mailing Address 1904 ECR 130			
Mailing Address			
City Midland	State TX	ZIP 79706	Country U.S.
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

MAY 07, 2002

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN, OK 73536-0440

PTAS

RECEIVED

MAY 13 2002

JOHN W. WUSTENBERG

Commissioner for Trademarks  
Arlington, VA 22202-3513  
www.uspto.gov



\*102011543A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/01/2002

REEL/FRAME: 012661/0385

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST. RE-RECORD TO REMOVE TWO ASSIGNORS INADVERTENTLY LISTED ON THE COVER SHEET OF A PREVIOUS ASSIGNMENT ON REEL 012284 FRAME 0337.

ASSIGNOR:

CONNELL, MICHAEL L.

DOC DATE: 10/12/2001

ASSIGNOR:

TUCKER, JAMES C.

DOC DATE: 10/12/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168

FILING DATE: 10/12/2001

PATENT NUMBER:

ISSUE DATE:



SEDLEY PYNE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

03-14-2002

Form PTO-1595  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌

R

102011543  
PATENT ONLYU.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael L. Connell  
James C. Tucker

3.1.02

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other

10/12/01

Execution Date:

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address:

Street Address: 10200 Bellaire Boulevard

City: Houston State: TX Zip: 77072

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s) 09/977,168

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: Halliburton Energy Services

Street Address: 2600 South Second Street

City: Duncan State: OK Zip: 73536-0440

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00



Enclosed



Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

DO NOT USE THIS SPACE

## 9. Signature.

John W. Wustenberg

Name of Person Signing

Signature

12 FEB 02

Date

Total number of pages including cover sheet, attachments, and documents: 6

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

03/13/2002 6TON11 00000132 080300 09997168

01 FC:581

40.00 CH

03-14-2002

Form PTO-1595  
(Rev. 03/01)

R

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼

102011543  
PATENT IS UNL.U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael L. Connell

James C. Tucker

3.1.02

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other \_\_\_\_\_

10/12/01

Execution Date: \_\_\_\_\_

Street Address: 10200 Bellaire Boulevard

City: Houston State: TX Zip: 77072

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 09/977,168

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: Halliburton Energy Services

Street Address: 2600 South Second Street

City: Duncan State: OK Zip: 73536-0440

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00



Enclosed



Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

DO NOT USE THIS SPACE

## 9. Signature.

John W. Wustenberg

Name of Person Signing

Signature

12 FEB 02

Date

Total number of pages including cover sheet, attachments, and documents: 6

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

03/13/2002 GTON11 00000132 080300 09997168

01 FC:581

40.00 CH

Form PTO-1595

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

101889450

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael L. Connell  
Robert G. Howard  
James C. Tucker  
Douglas N. Love

10/12/01

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Street Address: 10200 Bellaire BoulevardCity: Houston State: TX Zip: 77072Additional name(s) & address(es) attached? ☐ Yes ☒ NoExecution Date: October 12, 2001

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 10/12/01

A. Patent Application No.(s)

B. Patent No.(s)

09/977168

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy Services

Street Address: \_\_\_\_\_

2600 South Second StreetCity: Duncan State: OK Zip: 735366. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

## DO NOT USE THIS SPACE

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
Signature12 OCT 01

Date

Total number of pages including cover sheet, attachments, and documents: 4

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

10/29/2001 6TON11 00000100 080300 09977168

01 FC:581

40.00 CH

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application first executed on October 12, 2001, submitted concurrently herewith, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

Michael L. Connell  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

James C. Tucker  
James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Midland, Midland County, Texas U.S.A.

\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                              ) ss  
County of Midland    )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

B x Assignments  
C mmissioner of Patents and Trademarks  
Washington, D.C. 20231

CORRECTION OF RECORDED COVER SHEET ERROR(S) (37 C.F.R. 3.34)

NOTE: See 37 CFR 3.34.

1. Applicant has noted an error in the cover sheet for the assignment(s) (document(s)) previously recorded on October 12, 2001  
Date of recordal

Reel 012284 Frame 0337

2. Attached hereto is:

- ☐ the originally recorded document.  
☒ a copy of the originally recorded document.

3. Also attached hereto is a corrected cover sheet for recordation.

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

FACSIMILE

☐ transmitted by facsimile to the Patent and Trademark Office.

Date 02/13/02

Sheila Gibbs  
Signature

Sheila Gibbs  
(type or print name of person certifying)

(Correction of Recorded Cover Sheet Error(s) [16-8]—page 1 of 2)



4. The error in the originally recorded cover sheet is apparent when that cover sheet is compared with the recorded document because:

Applicant inadvertently listed all four (4) inventors on the recordation coversheet: Michael L. Connell; Robert G. Howard; James C. Tucker and Douglas N. Love.

Applicant should have only listed the two (2) inventors who had signed the Assignment: Michael L. Connell and James C. Tucker.

5. The recording fee is shown in the corrected cover sheet filed herewith. Payment of this recording fee is in the manner set forth in the corrected cover sheet.

*NOTE: "A fee is required for each application, patent and registration against which the document is recorded as identified in the cover sheet." 37 CFR 3.41*

Reg. No.: 35,415

Tel. No.: (580 ) 251-3782

Customer No.: 29920

  
SIGNATURE OF PRACTITIONER

John W. Wustenberg  
(type or print name of practitioner)

P.O. Box 1431  
P.O. Address

Duncan, OK 73536-0440



UNITED STATES  
PATENT AND  
TRADEMARK OFFICE

JAN 14 2002

TELEPHONE

JANUARY 08, 2002

PTAS

Chief Financial Officer and Chief Administrative Officer  
Washington, DC 20231  
www.uspto.gov

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN, OK 73536



\*101889450A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2001

REEL/FRAME: 012284/0337

NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CONNELL, MICHAEL L.

DOC DATE: 10/12/2001

ASSIGNOR:

HOWARD, ROBERT G.

DOC DATE: 10/12/2001

ASSIGNOR:

TUCKER, JAMES C.

DOC DATE: 10/12/2001

ASSIGNOR:

LOVE, DOUGLAS N.

DOC DATE: 10/12/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168

FILING DATE: 10/12/2001

PATENT NUMBER:

ISSUE DATE:

DOROTHY BASMA, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

Form PTO-1595  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼



101889450

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Michael L. Connell  
Robert G. Howard  
James C. Tucker  
Douglas N. Love

10/12/01

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: October 12, 2001

2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Street Address: 10200 Bellaire Boulevard

City: Houston State: TX Zip: 77072

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 10/12/01

A. Patent Application No.(s)

B. Patent No.(s)

09/977168

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy Services

Street Address: \_\_\_\_\_

2600 South Second Street

City: Duncan State: OK Zip: 73536

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed

☒ Authorized to be charged to deposit account

8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
Signature

12 OCT 01

Date

Total number of pages including cover sheet, attachments, and documents: 4

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

10/29/2001 6TOM11 00000100 080300 09977168

01 FC:581

40.00 CH

11046 U.S. PTO

09/977168



**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application first executed on October 12, 2001, submitted concurrently herewith, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

Michael L. Connell  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 12th day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

James C. Tucker

James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this 12th day of October, 2001.

Seal

Sheila D. Gibbs

(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Midland, Midland County, Texas U.S.A.

\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                                  ) ss  
County of Midland    )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Assignments  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

CORRECTION OF RECORDED COVER SHEET ERROR(S) (37 C.F.R. 3.34)

NOTE: See 37 CFR 3.34.

1. Applicant has noted an error in the cover sheet for the assignment(s) (document(s)) previously recorded on October 12, 2001  
Date of recordal

Reel 012284 Frame 0337

2. Attached hereto is:
  - ☐ the originally recorded document.
  - ☒ a copy of the originally recorded document.
3. Also attached hereto is a corrected cover sheet for recordation.

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

FACSIMILE

☐ transmitted by facsimile to the Patent and Trademark Office.

Date 02/13/02

Sheila Gibbs  
Signature

Sheila Gibbs  
(type or print name of person certifying)

(Correction of Recorded Cover Sheet Error(s) [16-8]—page 1 of 2)



4. The error in the originally recorded cover sheet is apparent when that cover sheet is compared with the recorded document because:

Applicant inadvertently listed all four (4) inventors on the recordation coversheet: Michael L. Connell; Robert G. Howard; James C. Tucker and Douglas N. Love.

Applicant should have only listed the two (2) inventors who had signed the Assignment: Michael L. Connell and James C. Tucker.

5. The recording fee is shown in the corrected cover sheet filed herewith. Payment of this recording fee is in the manner set forth in the corrected cover sheet.

*NOTE: "A fee is required for each application, patent and registration against which the document is recorded as identified in the cover sheet." 37 CFR 3.41*

Reg. No.: 35,415

Tel. No.: (580 ) 251-3782

Customer No.: 29920

  
SIGNATURE OF PRACTITIONER

John W. Wustenberg  
(type or print name of practitioner)

P.O. Box 1431  
P.O. Address

Duncan, OK 73536-0440

JAN 4 2002

RECEIVED

JANUARY 08, 2002

PTAS

Chief Financial Officer and Chief Administrative Officer  
Washington, DC 20231  
www.uspto.gov

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN, OK 73536



\*101889450A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/12/2001

REEL/FRAME: 012284/0337  
NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CONNELL, MICHAEL L.

DOC DATE: 10/12/2001

ASSIGNOR:

HOWARD, ROBERT G.

DOC DATE: 10/12/2001

ASSIGNOR:

TUCKER, JAMES C.

DOC DATE: 10/12/2001

ASSIGNOR:

LOVE, DOUGLAS N.

DOC DATE: 10/12/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168  
PATENT NUMBER:

FILING DATE: 10/12/2001  
ISSUE DATE:

DOROTHY BASMA, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

MAR 18 2002

MARCH 11, 2002

PTAS

HALLIBURTON ENERGY SERVICES  
JOHN W. WUSTENBERG  
2600 SOUTH SECOND STREET  
DUNCAN OK 73536

Chief Information Officer  
Washington, DC 20231  
www.uspto.gov



\*101951931A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/04/2002

REEL/FRAME: 012462/0831

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HOWARD, ROBERT G.

DOC DATE: 12/06/2001

ASSIGNOR:

LOVE, DOUGLAS N.

DOC DATE: 12/04/2001

ASSIGNEE:

HALLIBURTON ENERGY SERVICES, INC.  
10200 BELLAIRE BOULEVARD  
HOUSTON, TEXAS 77072

SERIAL NUMBER: 09977168

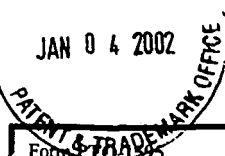
FILING DATE: 10/12/2001

PATENT NUMBER:

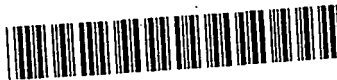
ISSUE DATE:

PEARLENE FOSTER, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

JAN 04 2002



01-17-2002



101951931

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

Form 295

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Robert G. Howard  
Douglas N. Love

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_Street Address: 10200 Bellaire BoulevardCity: Houston State: TX Zip: 77072Howard (12-06/01)  
Execution Date: Love (12/04/01)Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

09/977,168

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy ServicesStreet Address: 2600 South Second StreetCity: Duncan State: OK Zip: 735366. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
Signature6 DEC 01

Date

01/16/2002 DBYRNE 00000038 080300 09977168

Total number of pages including cover sheet, attachments, and documents: 4

01 FC:581

40.00 CH

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number 09/977,168 filed on October 12, 2001, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

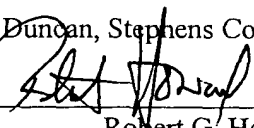
Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

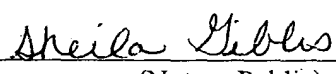
Executed this 6 day of December, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

  
\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this 6th day of December, 2001.

Seal

  
\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )


Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 4th day of December, 2001, at Midland, Midland County, Texas U.S.A.

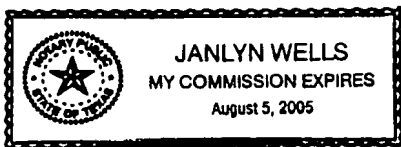
  
\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                              ) ss  
County of Midland    )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this 4th day of December, 2001.

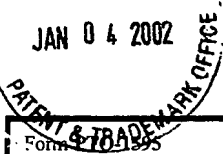
Seal

  
\_\_\_\_\_  
(Notary Public)

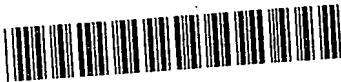




JAN 04 2002



01-17-2002



101951931

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark OfficeForm 1395  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings ⇌ ⇌ ⇌ ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Robert G. Howard  
Douglas N. Love

1-4-02

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Howard (12-06/01)

Execution Date: Love (12/04/01)

## 2. Name and address of receiving party(ies)

Name: Halliburton Energy Services, Inc.

Internal Address: \_\_\_\_\_

Street Address: 10200 Bellaire BoulevardCity: Houston State: TX Zip: 77072Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

## A. Patent Application No.(s)

09/977,168

## B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John W. Wustenberg

Internal Address: \_\_\_\_\_

Halliburton Energy ServicesStreet Address: 2600 South Second StreetCity: Duncan State: OK Zip: 735366. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00

- ☐ Enclosed  
☒ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0300

(Attach duplicate copy of this page if paying by deposit account)

## DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John W. Wustenberg

Name of Person Signing

John W. Wustenberg  
 Signature

6 DEC 01  
 Date

01/16/2002 DBYRNE 00000038 080300 09977168

Total number of pages including cover sheet, attachments, and documents: 4

01 FC:581

40.00 CH

Mail documents to be recorded with required cover sheet information to:  
 Commissioner of Patents & Trademarks, Box Assignments  
 Washington, D.C. 20231

**ASSIGNMENT**

Whereas, I/We, Michael L. Connell of Stephens County, Duncan, Oklahoma; Robert G. Howard of Stephens County, Duncan, Oklahoma; James C. Tucker of Carter County, Springer, Oklahoma and Douglas N. Love, of Midland County, Midland Texas, have invented APPARATUS AND METHOD FOR LOCATING JOINTS IN COILED TUBING OPERATIONS for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number 09/977,168 filed on October 12, 2001, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
Michael L. Connell

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Michael L. Connell and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this 6 day of December, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

  
\_\_\_\_\_  
Robert G. Howard

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

Before me personally appeared said Robert G. Howard and acknowledged the foregoing instrument to be his free act and deed this 6th day of December, 2001.

Seal

  
\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

Executed this \_\_\_\_\_ day of October, 2001, at Duncan, Stephens County, Oklahoma U.S.A.

\_\_\_\_\_  
James C. Tucker

State of Oklahoma     )  
                                  ) ss  
County of Stephens    )

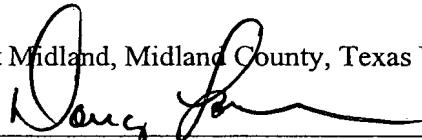
Before me personally appeared said James C. Tucker and acknowledged the foregoing instrument to be his free act and deed this \_\_\_\_\_ day of October, 2001.

Seal

\_\_\_\_\_  
(Notary Public)

My Commission Expires: September 13, 2004

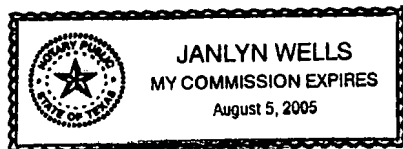
Executed this 4th day of December, 2001, at Midland, Midland County, Texas U.S.A.

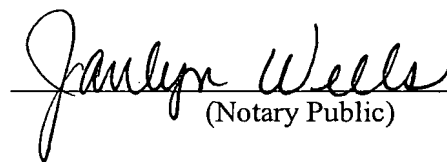
  
\_\_\_\_\_  
Douglas N. Love

State of Texas         )  
                              ) ss  
County of Midland    )

Before me personally appeared said Douglas N. Love and acknowledged the foregoing instrument to be his free act and deed this 4th day of December, 2001.

Seal



  
\_\_\_\_\_  
(Notary Public)